

What is the distance between the following lines?

ex:  
 $x = 10$   
 $x = 24$

14

ex:  
 $y = -5$   
 $y = 16$

21

ex:  
 $x = -3$   
 $x = 12$

15

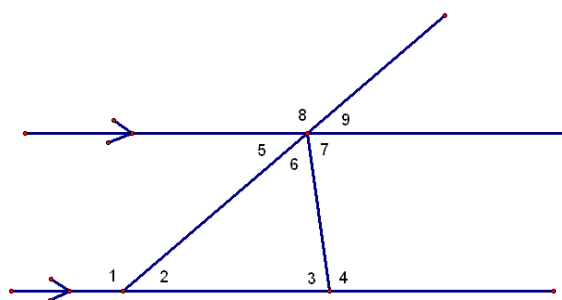
### Ch 3 Review

#### 3.1

- Parallel lines
- Skew lines
- Parallel planes
- Types of angles

#### 3.2

- If  $\parallel$ , then
  - corresponding angles are  $\cong$
  - alternate int. angles are  $\cong$
  - alternate ext. angles are  $\cong$
  - s-side (cons.) int. angles are suppl.
- Algebra questions (challenging)
- Proof



3.3

- Slope  $m = \frac{y_2 - y_1}{x_2 - x_1}$
- vertical lines no slope/undefined  $x = \text{—}$
- horizontal lines zero  $y = \text{—}$
- parallel lines same slope
- perpendicular lines opp + reciprocal

3.4

- Equations of lines

$$y = mx + b$$

$$Ax + By = C$$

3.5

- If corresponding angles are  $\cong$ ,
- If alternate int. angles are  $\cong$ ,
- If alternate ext. angles are  $\cong$ ,
- If s-side (cons.) int. angles are suppl.,
- then the lines are  $\parallel$ .
- Algebra questions (challenging)
- Proof
- Which lines are parallel?

3.6

- Perpendiculars and distance
- between horizontal lines
- between vertical lines
- use the distance formula

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

p167-170  
#s 1-25, 30, 32, 34-40  
p784 #16